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ABSTRACT

This report, designed as a planning tool, describes recent enrollment trends in Connecticut and projects enrollment in Connecticut's colleges and universities through the end of the century. Projections are reported as ranges because of the volatility of attendance patterns. Tables present data on undergraduate, graduate, full- and part-time enrollments and projections for all schools and separately for public and private institutions for 1987, 1990, 1995, and 2000. Percentage changes for the overall period are also noted. Individual institutional projections are given for the University of Connecticut, Connecticut State University, and system data are given for regional community colleges, state technical colleges, regional independent institutions, two-year independent institutions, and national independent institutions. Actual 1987 and projected 2000 headcounts and full-time-equivalent enrollments are tabulated by institution or above grouping; projections are given in lower and upper ranges and percent changes from 1987. Some narration is included. (MSE)

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Report

Board of Governors for Higher Education
Department of Higher Education
State of Connecticut

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Connecticut Higher Education Enrollment Projections 1990-2000

Introduction

A shrinking youth population during the remainder of the twentieth century is likely to end 300 years of fairly steady enrollment growth in higher education in the United States. Although the degree of demographic change will vary by state, the general pattern of decline in the pool of traditional-age students will affect undergraduate numbers. Postbaccalaureate enrollment, however, is affected more by market factors than demographics and is likely to remain stable or decline only slightly.

Connecticut mirrors the national trend, with a population increasingly made up of older citizens. The challenge for colleges and universities in the state is to adapt to the changing demography of the potential student population. In this context, estimates of the number of students likely to attend different types of institutions can inform state and campus planning related to funding, student housing, course and program offerings, financial aid, staffing, and other areas.

This report, designed for use as a planning tool, describes recent enrollment trends in Connecticut and projects enrollment in Connecticut's colleges and universities through the end of the century. In the past, college enrollment has been forecast by applying existing attendance rates to projected population growth. Recently, however, attendance patterns have become more volatile, as more older and part-time students entered higher education. As a result, the previous methodology that yielded a single enrollment estimate may not be reliable. In order to produce more accurate and useful indicators of future enrollment, the projections in this report are presented as ranges.

Higher Education Enrollment and Population Trends in Connecticut

Following years of steady growth, enrollment at Connecticut colleges and universities began to decline in 1984, dropping from 163,225 in 1983 to 160,460 in 1984 (see Table 1). The three-year decline reversed in 1987 with an overall gain of 1.9% (with headcount rising from 158,309 in 1986 to 161,313 in 1987) due mostly to increases in public sector enrollment. As numbers changed, so did the composition of the student population. Part-time students accounted for growing portions of enrollment, affecting full-time-equivalent (FTE) counts. Women and older undergraduates also became more prevalent. Table A1 in the Appendix contains headcount and FTE trends for public and independent institutions during the 1980's and Table A2 displays the proportions of undergraduates who were over age 24, part time, and female.

Table 1
Headcount Enrollment Trends by Sector
Connecticut Institutions
1980 - 1987

	1980	1981	1982	1983	1984	1985	1986	1987
Public	96,771	98,427	100,144	101,567	99,601	98,616	98,828	101,593
Independent	62,378	63,281	61,404	61,658	60,859	60,775	59,481	59,720
TOTAL	159,149	161,708	161,548	163,225	160,460	159,391	158,309	161,313

Changes in undergraduate enrollment (see Appendix Table A3) relate closely to numbers of high school graduates. In 1987, Connecticut high schools graduated 13.9% fewer students than in 1980. Although large percentages of these students went on to college -- about 65% -- a majority attended out-of-state colleges (53.3%).

The drop in high school graduates resulted from a smaller youth population. Although the state's overall population is growing, the increase is in older people. In 1987, the median age of Connecticut's citizenry was 34.2, trailing only Florida and New Jersey, and projections indicate that figure will rise. As the population ages, the pool of traditional undergraduate students will continue to shrink. The number of state residents between ages 15 and 24 is projected to drop almost 25% during the remainder of the century.

At the postbaccalaureate level, enrollment has increased during the 1980's in both public and independent institutions. This enrollment is less dependent on recent high school graduates, and includes substantial portions of older and part-time students. Postbaccalaureate enrollment trends, both headcount and FTE, are displayed in Table A4 in the Appendix.

In summary, Connecticut's undergraduate enrollment, both headcount and FTE, has decreased from the peak in the early 1980's. Headcount declines are closely related to fewer numbers of 18- to 24-year-olds and high rates of college attendance out of state. The decline in FTE reflects growing part-time attendance. Postbaccalaureate enrollment has increased enough to offset declines in undergraduates. As a result, total enrollment has remained stable during the decade.

Methodology

This report projects Connecticut higher education enrollment using both demographic trends and attendance patterns. Other factors likely to affect enrollment are not included. For example, changes in admission criteria, tuition levels, and financial aid policies can affect enrollment in ways that demographics alone do not indicate. A detailed explanation of the method is contained in the Appendix.

Since undergraduate attendance patterns have fluctuated in recent years, using a single year to project future enrollment might result in unreliable estimates. Instead, the rate of higher education participation by various age groups from 1985 to 1987 is used. These participation rates are then applied to census data to project future enrollments. Postbaccalaureate projections are based on continuation of trends, combined with national forecasts.

Projections at all levels are presented as ranges. The lower end of the range is based on the overall participation rates in the lowest enrollment year between 1980 and 1987, and is more dependent on demographic changes. The upper end of the range, based on the overall participation rate in the highest enrollment year between 1980 and 1987, accounts for increasing participation of older, nontraditional students. In reality, future enrollments are likely to fall somewhere between the two extremes, as institutions seek new student markets while coping with reduced numbers in the traditional applicant pool.

Statewide Projections

Total higher education enrollment in Connecticut in 2000 will range from 141,200 to 158,400. These estimates represent a decline of 2% to 12% from the 1987 headcount of 161,313 (see Figure 1). Because many more students are likely to attend part time, FTE enrollment will decline more sharply, dropping from 105,619 in 1987 to between 89,800 and 100,000 by the end of the century. Total projections by level are displayed in Table 2, with projected public enrollment in Table 3 and projected independent enrollment in Table 4.

Figure 1
Total Headcount Enrollment in Connecticut
Trends and Projections
1980-2000

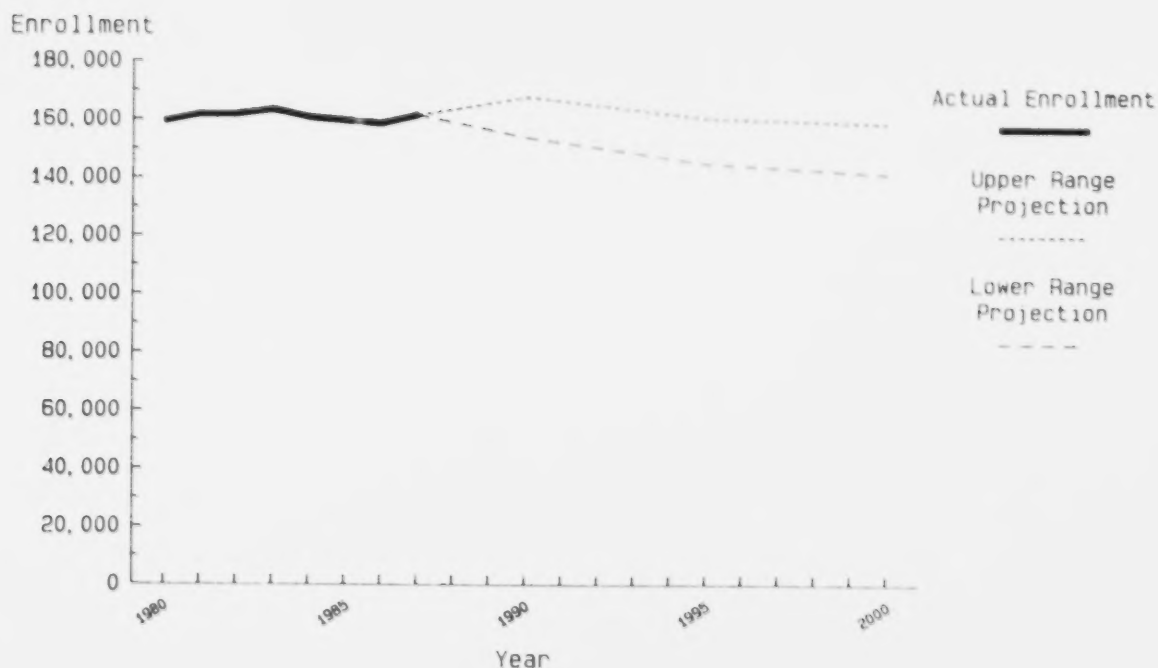


Table 2
Enrollment and Projections
Connecticut Institutions
1987 - 2000

					1987 - 2000	
					% Change	
					Lower	Upper
	1987	1990	1995	2000	Range	Range
<u>Undergraduate</u>						
Full-Time	70,549	64,000-69,800	57,200-62,300	55,700-60,500		
Part-Time	56,682	55,700-61,900	53,700-59,700	51,600-57,300		
Total	127,231	119,600-131,600	110,800-121,900	107,200-117,700	-16%	-7%
FTE	86,989	80,500-88,300	73,400-80,200	71,200-77,700	-18%	-11%
<u>Postbaccalaureate</u>						
Full-Time	11,746	11,700-12,500	11,700-13,400	11,700-14,400		
Part-Time	22,336	22,300-23,500	22,200-25,000	22,200-26,300		
Total	34,082	34,100-36,000	34,000-38,400	34,000-40,700	0%	+19%
FTE	18,630	18,600-19,700	18,600-21,000	18,600-22,300	0%	+20%
<u>Total</u>						
Full-Time	82,295	75,700-82,300	68,900-75,700	67,400-74,900		
Part-Time	79,018	78,000-85,400	75,900-84,700	73,800-83,600		
Total	161,313	153,700-167,600	144,800-160,300	141,200-158,400	-12%	-2%
FTE	105,619	99,100-108,000	92,000-101,200	89,800-100,000	-15%	-5%

Note: Full-time and part-time enrollments may not sum to totals in this and other tables due to rounding.

Table 3
Enrollment and Projections, Connecticut
Public Institutions
1987 - 2000

					1987 - 2000	
					% Change	
	1987	1990	1995	2000	Lower Range	Upper Range
<u>Undergraduate</u>						
Full-Time	42,161	37,300-41,400	32,500-36,100	31,400-34,800		
Part-Time	43,830	42,500-47,300	40,900-45,500	39,400-43,800		
Total	85,991	79,800-88,700	73,400-81,600	70,800-78,600	-18%	-9%
FTE	54,491	49,600-55,200	44,600-49,400	43,000-47,600	-21%	-13%
<u>Postbaccalaureate</u>						
Full-Time	4,501	4,500-4,600	4,500-4,800	4,500-5,000		
Part-Time	11,101	11,100-11,800	11,100-12,700	11,100-13,500		
Total	15,602	15,600-16,400	15,600-17,500	15,600-18,500	0%	+19%
FTE	7,915	7,900-8,200	7,900-8,600	7,900-9,100	0%	+15%
<u>Total</u>						
Full-Time	46,662	41,800-46,000	37,000-40,900	35,900-39,800		
Part-Time	54,931	53,600-59,100	52,000-58,200	50,500-57,300		
Total	101,593	95,400-105,100	89,000-99,100	86,400-97,100	-15%	-4%
FTE	62,406	57,500-63,400	52,500-58,000	50,900-56,700	-18%	-9%

Table 4
Enrollment and Projections, Connecticut
Independent Institutions
1987 - 2000

	1987	1990	1995	2000	1987 - 2000 % Change	
					Lower Range	Upper Range
<u>Undergraduate</u>						
Full-Time	28,388	26,700-28,400	24,700-26,200	24,300-25,700		
Part-Time	12,852	13,200-14,600	12,800-14,200	12,200-13,500		
Total	41,240	39,800-42,900	37,400-40,300	36,400-39,100	-12%	-5%
FTE	32,498	30,900-33,100	28,800-30,800	28,200-30,100	-13%	-7%
<u>Postbaccalaureate</u>						
Full-Time	7,245	7,200-7,900	7,200-8,600	7,200-9,400		
Part-Time	11,235	11,200-11,700	11,100-12,300	11,100-12,800		
Total	18,480	18,500-19,600	18,400-20,900	18,400-22,200	0%	+20%
FTE	10,715	10,700-11,500	10,700-12,400	10,700-13,200	0%	+23%
<u>Total</u>						
Full-Time	35,633	33,900-36,300	31,900-34,800	31,500-35,100		
Part-Time	24,087	24,400-26,300	23,900-26,500	23,300-26,300		
Total	59,720	58,300-62,500	55,800-61,200	54,800-61,300	-8%	+3%
FTE	43,213	41,600-44,600	39,500-43,200	38,900-43,300	0%	-10%

Because of dependence on the youth population, enrollment declines will be greatest at the undergraduate level, with 10,000 to 20,000 fewer students likely to attend college in the state. Undergraduate enrollment is projected to range between 107,200 and 117,700 by the end of the next decade. As more students enroll part time, FTEs will continue to drop more sharply than headcounts. Colleges and universities that draw primarily from state and regional markets will be most seriously affected, while the independent institutions that attract students nationally are likely to maintain stable headcount and FTE enrollments.

At the postbaccalaureate level, headcount and FTE enrollment is projected to range between its current level up to an increase of about 20%, or from 34,000 to 40,700 students. Enrollment patterns are likely to be similar in both public and independent institutions.

The possibility of greater postbaccalaureate enrollment will not offset projected drops in undergraduates. Thus, Connecticut higher education, both public and independent, is facing a decade of declining student numbers. Institutions most vulnerable to the effects of the shrinking youth population are the four-year public and regional independent institutions and the two-year independents, although increased drawing power and larger nontraditional student populations may help some institutions maintain undergraduate enrollment. Public community colleges, which enroll more older students, and the national independents, which are highly competitive, will be less affected by declines in the population of traditional-aged undergraduates. These varying patterns are described in detail for each type of institution.

Institutional Projections

University of Connecticut. The University of Connecticut is projected to enroll between 20,000 and 22,100 students by the end of the century (see Table 5). This marks a substantial decline from the 1987 enrollment of 25,040.

The enrollment loss will occur at the undergraduate level. In 2000, UConn is projected to enroll between 12,600 and 13,900 undergraduates, well below the 1987 headcount of 17,671 undergraduates and contrasting markedly with the growth of the 1980's in general. FTE enrollment is projected to decline even more steeply, as more students enroll part time.

These sharply lower projections are based on the University's reliance to date on a relatively traditional student population drawn primarily from within Connecticut. UConn appears to have attracted increasing numbers of these students since 1980, however, with enrollment growth of 14.2% despite an 8.3% drop in the 18- to 24-year-old population. Continued increases in applications from in and out of state, as well as increases in older and part-time students, could help ameliorate the effects of the shrinking pool of traditional students.

Table 5
University of Connecticut*
Enrollment Projections
1990-2000

					1987 - 2000	
					% Change	
	1987	1990	1995	2000	Lower Range	Upper Range
<u>Undergraduate</u>						
Full-Time	14,639	12,300-13,600	10,500-11,700	10,200-11,300		
Part-Time	3,032	2,800-3,100	2,600-2,900	2,400-2,600		
Total	17,671	15,100-16,700	13,100-14,600	12,600-13,900	-29%	-21%
FTE	15,335	13,100-14,500	11,300-12,500	10,900-12,000	-29%	-22%
<u>Postbaccalaureate*</u>						
Full-Time	3,398	3,400-3,400	3,400-3,500	3,400-3,600		
Part-Time	3,971	4,000-4,200	4,000-4,400	4,000-4,600		
Total	7,369	7,400-7,600	7,400-7,900	7,400-8,200	0%	+11%
FTE	4,629	4,600-4,700	4,600-4,800	4,600-5,000	0%	+8%
<u>Total</u>						
Full-Time	18,037	15,700-17,000	13,900-15,200	13,600-14,900		
Part-Time	7,003	6,800-7,300	6,600-7,300	6,400-7,200		
Total	25,040	22,500-24,300	20,500-22,500	20,000-22,100	-20%	-12%
FTE	19,964	17,700-19,200	15,900-17,300	15,500-17,000	-22%	-15%

* University of Connecticut Health Center enrollments are included.

Postbaccalaureate enrollments are projected to remain stable or increase somewhat during the next decade, with numbers ranging from the current headcount of 7,369 to as much as 8,200. FTE is likely to show similar patterns. The potential for stability or growth is the result of an older student body, many of whom attend part time. Demand for graduate education from these nontraditional students has been high and is likely to remain so.

Demographics alone indicate serious enrollment drops at UConn. Overall headcount enrollment could decline as much as 20%, the result of significantly fewer undergraduates. If the University can continue to counter demographic declines, however, attendance patterns and drawing power may lessen the severity of the decline to about 12% fewer students overall than in 1987.

Connecticut State University. By the end of the century, CSU is projected to enroll between 30,100 and 34,600 students. This projection, displayed in Table 6, is below the 1987 headcount of 36,271 and signals the end of the enrollment growth of the 1980's.

A smaller undergraduate population accounts for the decline, with about 3,700 to 6,000 fewer students on the four campuses in 2000 as compared to 1987. The projected undergraduate enrollment of 21,900 to 24,300 at the end of the century is 13% to 22% lower than 1987 headcounts and results from large numbers of students under age 25, a group whose numbers are projected to decline. The FTE enrollment decline that began in 1984 will steepen, as the number of part-time undergraduates continues to increase.

Table 6
Connecticut State University
Enrollment Projections
1990-2000

1990-2000					1987 - 2000	
					% Change	
	1987	1990	1995	2000	Lower Range	Upper Range
Undergraduate						
Full-Time	17,955	16,000-17,800	13,900-15,400	13,300-14,700		
Part-Time	10,083	9,600-10,700	9,000-10,000	8,600-9,600		
Total	28,038	25,600-28,500	22,900-25,400	21,900-24,300	-22%	-13%
FTE	20,415	18,500-20,600	16,300-18,100	15,600-17,300	-24%	-15%
Postbaccalaureate						
Full-Time	1,103	1,100-1,200	1,100-1,300	1,100-1,400		
Part-Time	7,130	7,100-7,600	7,100-8,300	7,100-8,900		
Total	8,233	8,200-8,800	8,200-9,600	8,200-10,300	0%	+25%
FTE	3,286	3,300-3,500	3,300-3,800	3,300-4,100	0%	+25%
Total						
Full-Time	19,058	17,100-19,000	15,000-16,700	14,400-16,100		
Part-Time	17,213	16,700-18,300	16,100-18,300	15,700-18,500		
Total	36,271	33,800-37,300	31,100-35,000	30,100-34,600	-17%	-5%
FTE	23,701	21,800-24,100	19,600-21,900	18,900-21,400	-20%	-10%

In contrast, postbaccalaureate enrollment will remain stable or may even increase, with a headcount at the end of the next decade ranging from 8,233 to as much as 10,300. FTE growth will be similar, ranging from 3,300 to 4,100.

CSU's undergraduate enrollment is primarily traditional-aged students from within Connecticut. The demographic projections for this group, combined with continued reliance on their attendance, signal major enrollment declines. Attracting more part-time and older undergraduates, and maintaining postbaccalaureate enrollment, may help CSU counter demographic declines, but even the most optimistic scenario points to moderate decline during the next decade.

Regional Community Colleges. In contrast to growth in the 1980's at UConn and CSU, headcount enrollment in the regional community colleges has fluctuated, with 1987 levels similar to those of 1980. Stable headcounts are projected for the 1990's (see Table 7). By the year 2000, between 31,000 and 34,500 students will be enrolled, a relatively small decline from the 1987 enrollment of 34,767. FTEs will drop more sharply, however, as part-time enrollment continues to increase.

The community colleges enroll large numbers of older students, a growing segment of the state's population. In addition, with a majority of part-timers, programs and services are already in place to attract and serve nontraditional students. These factors should enable the community colleges to maintain enrollment equilibrium despite changing demographics.

Table 7
Connecticut Regional Community Colleges
Enrollment Projections
1990-2000

	1987	1990	1995	2000	1987 - 2000 % Change	
					Lower Range	Upper Range
Undergraduate						
Full-Time	7,490	6,900-7,700	6,200-6,900	6,100-6,800		
Part-Time	27,277	26,200-29,200	25,500-28,400	24,900-27,700		
Total	34,767	33,100-36,900	31,700-35,300	31,000-34,500	-11%	-1%
FTE	15,279	14,400-16,100	13,600-15,100	13,300-14,800	-13%	-3%

State Technical Colleges. The state technical colleges have already experienced enrollment declines much greater than demographic shifts would indicate. Headcount enrollment dropped 39.3% from a peak of 9,084 in 1982 to 5,515 in 1987. These colleges have been unable to maintain enrollment during growth years and have lost enrollment at rates far greater than the demographic situation would suggest. Consequently, accurately forecasting their response to decline is difficult.

Based on population projections, a pool of potential students should exist to reverse the precipitous declines of the 1980's at the state technical colleges. Over half of the 1987 student body was over age 24, and this group is projected to increase over the next decade. If these institutions could be more successful in attracting both older and more traditional students, enrollment by the end of the century could range from 5,300 to 5,900 students (see Table 8). In other words, under the most optimistic circumstances, the state technical colleges could maintain enrollment at 1987 levels, but it is unlikely that future enrollment will surpass the peak reached in 1982. Growth is very unlikely, and, if drawing power continues to diminish and attrition rates remain high, future enrollment declines could be even more severe than those of recent years. These declines, compounded by the recent drops, could threaten institutional viability.

Table 8
Connecticut State Technical Colleges
Enrollment Projections
1990-2000

	1987	1990	1995	2000	1987 - 2000 % Change	
					Lower Range	Upper Range
<u>Undergraduate</u>						
Full-Time	2,077	2,100-2,300	1,900-2,100	1,800-2,000		
Part-Time	3,438	3,900-4,300	3,800-4,200	3,500-3,900		
Total	5,515	6,000-6,600	5,700-6,300	5,300-5,900	-4%	+7%
FTE	3,462	3,600-4,000	3,400-3,700	3,200-3,500	-8%	+1%

Regional Independent Institutions. The 16 colleges and universities in this group are projected to enroll between 35,200 and 39,800 students by the end of the century (see Table 9). This modest decline will not affect all institutions in the same manner, and some are likely to continue the precipitous drops of the early 1980's. Overall enrollment for these institutions dropped 10.9% from 44,534 in the peak year of 1981 to 39,689 in 1987.

The enrollment loss is projected to occur at the undergraduate level. By the end of the next decade, the regional independents could enroll between 23,100 and 25,600 undergraduates, as declines continue. As part-time undergraduate numbers grow, FTE enrollment will decline even more than headcount.

Stability in overall enrollment depends on the ability of these institutions to continue increasing postbaccalaureate numbers. The regional independents are projected to enroll about 12,000 to 14,200 postbaccalaureate students in 2000. FTE is likely to show similar patterns of stability or modest increase. The potential for growth results from an adult student population, large part-time enrollment, and increasing interest in graduate and professional higher education.

The optimistic scenario for overall enrollment is based on continuing growth at the postbaccalaureate level, drawing more in-state and part-time students, and attracting more undergraduates from out of state. If the regional independents fail to attract more of these students, the enrollment decline begun in 1982 is likely to continue, with a 20% overall loss by the end of the century as compared to the peak enrollment year of 1981.

Table 9
Connecticut Regional Independent Institutions
Enrollment Projections
1990-2000

					1987 - 2000	
					% Change	
	1987	1990	1995	2000	Lower Range	Upper Range
<u>Undergraduate</u>						
Full-Time	16,069	14,500-16,100	12,600-14,000	12,200-13,500		
Part-Time	11,547	11,900-13,200	11,500-12,800	10,900-12,100		
Total	27,616	26,400-29,300	24,100-26,800	23,100-25,600	-16%	-7%
FTE	19,699	18,300-20,300	16,300-18,100	15,700-17,400	-20%	-12%
<u>Postbaccalaureate</u>						
Full-Time	1,834	1,800-2,000	1,800-2,200	1,800-2,400		
Part-Time	10,239	10,200-10,700	10,200-11,300	10,200-11,800		
Total	12,073	12,100-12,700	12,100-13,500	12,100-14,200	0%	+18%
FTE	5,273	5,300-5,600	5,300-6,000	5,300-6,300	0%	+20%
<u>Total</u>						
Full-Time	17,903	16,300-18,100	14,400-16,200	14,000-15,900		
Part-Time	21,786	22,100-23,900	21,700-24,100	21,100-23,900		
Total	39,689	38,500-42,000	36,200-40,300	35,200-39,800	0%	-11%
FTE	24,972	23,600-25,900	21,600-24,100	21,000-23,700	-16%	-5%

Two-Year Independent Institutions. Headcounts at the two-year independents at the end of the century are projected to equal or be only slightly lower than the ranges that occurred in the 1980's. FTE enrollment is expected to decline, however, as more students attend part time. These projections are contained in Table 10.

These institutions are generally small and enroll substantial portions of traditional-aged students from within Connecticut. These factors combine to limit chances for enrollment growth and point to the need to expand nontraditional student markets.

Table 10
Connecticut Two-Year Independent Institutions
Enrollment Projections
1990-2000

					1987 - 2000	
					% Change	
					Lower	Upper
	1987	1990	1995	2000	Range	Range
<u>Undergraduate</u>						
Full-Time	1,064	900-1,000	800-900	800-900		
Part-Time	740	700-800	700-800	700-800		
Total	1,804	1,600-1,800	1,500-1,700	1,500-1,700	-17%	-6%
FTE	1,298	1,100-1,300	1,000-1,200	1,000-1,200	-23%	-8%

National Independent Institutions. The four national independent institutions are relatively immune to demographic changes in the state, since they are highly competitive and draw from a national applicant pool. Enrollment is more likely to be limited by institutional policy than by student availability. As a result, the number of students is projected to remain about the same at the undergraduate level, with stability assured among postbaccalaureates, although the potential exists for substantial growth at this level due to great demand (see Table 11). FTE enrollment is expected to follow similar patterns, as the institutions continue to enroll large numbers of full-time students.

Table 11
Connecticut National Independent Institutions
Enrollment Projections
1990-2000

					1987 - 2000	
					% Change	
	1987	1990	1995	2000	Lower Range	Upper Range
<u>Undergraduate</u>						
Full-Time	11,255	11,300	11,300	11,300		
Part-Time	565	600	600	600		
Total	11,820	11,800	11,800	11,800	0%	
FTE	11,500	11,500	11,500	11,500	0%	
<u>Postbaccalaureate</u>						
Full-Time	5,411	5,400-5,900	5,400-6,400	5,400-7,000		
Part-Time	996	1,000	900-1,000	900-1,000		
Total	6,407	6,400-6,900	6,300-7,400	6,300-8,000	-2%	+25%
FTE	5,442	5,400-5,900	5,400-6,400	5,400-6,900	-1%	+27%
<u>Total</u>						
Full-Time	16,666	16,700-17,200	16,700-17,700	16,700-18,300		
Part-Time	1,561	1,600-1,600	1,500-1,600	1,500-1,600		
Total	18,227	18,200-18,700	18,100-19,200	18,100-19,800	-1%	+9%
FTE	16,943	16,900-17,400	16,900-17,900	16,900-18,400	0%	+9%

Conclusions

Colleges and universities already are responding to a shrinking population of potential students. By attracting more traditional-aged students and more part-time and older students, some public institutions have delayed enrollment declines. Graduate institutions, both public and independent, have been able to offset undergraduate enrollment drops somewhat with increases in postbaccalaureate numbers. Projections, summarized in Tables 12 and 13, indicate a future of overall decline.

State population projections leave no doubt that the number of 18- to 24-year-olds will continue to drop through the end of the century; the number of high school graduates in Connecticut is declining already. It is unlikely that the proportion of graduates going on to college can increase enough to affect higher education enrollment, since the state has relatively high rates of graduation and college attendance. If the state's colleges and universities can attract more of the high school graduates who attend college in other states -- over 53% in 1986 -- they could minimize some of the demographic decline. Without the ability to attract more students, both from the traditional age group and from older segments of the population, colleges and universities that have relied heavily on recent high school graduates for undergraduate enrollment will suffer serious declines.

In many cases, enrollment growth in the 1980's resulted from increasing the numbers of older and part-time students. Colleges and universities may be able to continue attracting these students, as well as those of traditional ages, with increased financial aid, expanded programs, career-oriented offerings, special services, and improved recruitment and retention.

Recruitment, admissions, and enrollment management policies that continue as usual, however, will surely result in enrollment losses. In addition, changes in other areas could compound the effects of demographic declines. For example, tuition increases, more reliance on student loans and less grant availability, and increased in-house corporate education could further reduce the numbers of potential students. Ironically, broad access to higher education may ultimately limit enrollment, since future student markets become saturated as college-going rates increase and larger proportions of the population attend college. In other words, the pool of potential undergraduates -- those whom higher education has not served -- diminishes.

The population patterns projected through the next decade will challenge Connecticut higher education. The enrollment growth taken for granted until the 1980's has ended. Demographic projections indicate that colleges and universities must continue to attract and serve traditional students from a declining pool, while addressing the needs of an older population that may be more interested in part-time attendance and career-related education. In this context of change, the future vitality of higher education depends on creative responses.

Table 12
Connecticut Actual and Projected Headcount Enrollment
by Type of Institution
1987 - 2000

	1987 Actual Headcount	2000			
		Lower Range Headcount	% Change	Upper Range Headcount	% Change
<u>University of Connecticut</u>					
Undergraduate	17,671	12,600	-29%	13,900	-21%
Postbaccalaureate	7,369	7,400	0%	8,200	+11%
Total	25,040	20,000	-20%	22,100	-12%
<u>Connecticut State University</u>					
Undergraduate	28,038	21,900	-22%	24,300	-13%
Postbaccalaureate	8,233	8,200	0%	10,300	+25%
Total	36,271	30,100	-17%	34,600	-5%
<u>Regional Community Colleges</u>					
Undergraduate	34,767	31,000	-11%	34,500	-1%
<u>State Technical Colleges</u>					
Undergraduate	5,515	5,300	-4%	5,900	+7%
Total Public	101,593	86,400	-15%	97,100	-4%
<u>National Independent</u>					
Undergraduate	11,820	11,800	0%	11,800	0%
Postbaccalaureate	6,407	6,300	-1%	8,000	+27%
Total	18,227	18,100	-1%	19,800	+9%
<u>Regional Independent</u>					
Undergraduate	27,616	23,100	-16%	25,600	-7%
Postbaccalaureate	12,073	12,100	0%	14,200	+18%
Total	39,689	35,200	-11%	39,800	0%
<u>Two-Year Independent</u>					
Undergraduate	1,804	1,500	-17%	1,700	-6%
Total Independent	59,720	54,800	-8%	61,300	+3%
Grand Total	161,313	141,200	-12%	158,400	-2%

Table 13
Connecticut Actual and Projected FTE Enrollment
by Type of Institution
1987 - 2000

	1987 Actual Headcount	2000			
		Lower Range Headcount	% Change	Upper Range Headcount	% Change
<u>University of Connecticut</u>					
Undergraduate	15,335	10,900	-29%	12,000	-22%
Postbaccalaureate	4,629	4,600	0%	5,000	+8%
Total	19,964	15,500	-22%	17,000	-15%
<u>Connecticut State University</u>					
Undergraduate	20,415	15,600	-24%	17,300	-15%
Postbaccalaureate	3,286	3,300	0%	4,100	+25%
Total	23,701	18,900	-20%	21,400	-10%
<u>Regional Community Colleges</u>					
Undergraduate	15,279	13,300	-13%	14,800	-3%
<u>State Technical Colleges</u>					
Undergraduate	3,462	3,200	-8%	3,500	+1%
Total Public	62,406	50,900	-18%	56,700	-9%
<u>National Independent</u>					
Undergraduate	11,501	11,500	0%	11,500	0%
Postbaccalaureate	5,442	5,400	-1%	6,900	+27%
Total	16,943	16,900	0%	18,400	+9%
<u>Regional Independent</u>					
Undergraduate	19,699	15,700	-20%	17,400	-12%
Postbaccalaureate	5,273	5,300	0%	6,300	+20%
Total	24,972	21,000	-16%	23,700	-5%
<u>Two-Year Independent</u>					
Undergraduate	1,298	1,000	-23%	1,200	-8%
Total Independent	43,213	38,900	-10%	43,300	0%
Grand Total	105,619	89,800	-15%	100,000	-5%

APPENDIX

Methodology

An age-specific attendance-ratio method was used to estimate enrollments for undergraduate Connecticut residents by sex and full- and part-time status for 1990, 1995, and 2000. The method is based upon the assumption that enrollment patterns will remain the same, with stability in the proportions of out-of-state students. In addition, the method for developing full-time equivalent enrollments assumes stability in course loads. Undergraduate projections were not developed for the four national independent institutions, since these institutions draw heavily from out-of-state and also maintain generally stable undergraduate enrollments. Postbaccalaureate enrollment projections were developed, using a linear regression methodology. High and low undergraduate and postbaccalaureate enrollment projections were developed, producing projection ranges. The U.S. Coast Guard Academy, a federal institution, was not included in this report.

1. Using institutionally reported age data (IPEDS Enrollment Survey, Fall 1985, 1986, and 1987), the distribution of full- and part-time male and female Connecticut resident undergraduate students by age category (15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-59, 60+) was tabulated for each type of Connecticut higher education institution for the three-year period from 1985 through 1987. These data were applied to the percentage of Connecticut resident students within each type of institution for 1985 through 1987 to estimate the number of Connecticut resident students in each age category for that period.
2. In-state "attendance ratios" for each type of institution by age, sex, and attendance status were calculated by dividing 1985 through 1987 in-state enrollment estimates in each of the four categories (full- and part-time male and female students) by 1985 through 1987 Connecticut population estimates by age and sex. Population estimates were derived from data extracted from the "Revised Age and Sex Distributions of Population Projections for Connecticut Municipalities & Regions to the Year 2000" (December 1984) published by the Connecticut Data Census Center of the Comprehensive Planning Division of the Connecticut Office of Policy and Management. Connecticut 1986 and 1987 population estimates were calculated assuming a constant annual change between 1985 and 1990 Connecticut population estimates.
3. The 1985 through 1987 attendance ratios were multiplied by 1990, 1995, and 2000 Connecticut population projections to produce in-state enrollment projections for each type of institution by age, sex, status.

4. Undergraduate enrollment projection ranges were developed by calculating the statewide attendance ratios for 1980 through 1987, identifying the high and low attendance ratio years, and determining the difference between these attendance ratios and the three-year attendance ratio (1985-1987) utilized to project enrollments in this study. These calculations resulted in a high adjustment of 10 percent and a low adjustment of 1 percent.
5. Out-of-state enrollments were estimated as a constant proportion of enrollments of undergraduates.
6. Graduate enrollment projection ranges were developed by assuming stable graduate enrollment until the end of the century as a low projection and utilizing a linear regression methodology as a high projection. The former is a trend forecast in many current enrollment projection studies. The latter involves applying the average annual change in graduate enrollment between 1980 and 1987 to each year between 1987 and 2000. First-professional enrollments were estimated to remain constant. Projected postbaccalaureate enrollments were produced by summing graduate and first-professional enrollment projections.
7. Projected headcount enrollments were converted to full-time equivalent enrollments by applying the ratio of the full-time equivalent enrollment to headcount enrollment for 1985-1987 for full-time and part-time undergraduates and postbaccalaureate students and applying this ratio to projected full-time and part-time headcount enrollments for undergraduates and postbaccalaureate students.
8. Total enrollment projections were developed by summing undergraduates and postbaccalaureate students.

Table A1
Total Connecticut Enrollment
Headcount and FTE
1980-1987

	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
HEADCOUNT								
<u>Public Institutions</u>								
University of Connecticut	22,407	22,971	23,316	23,428	23,482	23,568	24,161	25,040
Connecticut State University	32,422	32,306	32,380	33,661	33,717	34,302	34,837	36,271
Regional Community Colleges	34,082	34,445	35,364	35,625	34,509	33,954	33,437	34,767
State Technical Colleges	7,860	8,705	9,084	8,853	7,893	6,792	6,393	5,515
<u>Total, Public Institutions</u>	<u>96,771</u>	<u>98,427</u>	<u>100,144</u>	<u>101,567</u>	<u>99,601</u>	<u>98,616</u>	<u>98,828</u>	<u>101,593</u>
<u>Independent Institutions</u>								
National	17,087	17,183	17,243	17,338	17,972	18,082	18,277	18,227
Regional	43,694	44,534	42,607	42,706	41,212	40,892	39,356	39,689
Two-Year	1,597	1,564	1,554	1,614	1,675	1,801	1,848	1,804
<u>Total, Independent Institutions</u>	<u>62,378</u>	<u>63,281</u>	<u>61,404</u>	<u>61,658</u>	<u>60,859</u>	<u>60,775</u>	<u>59,481</u>	<u>59,720</u>
<u>TOTAL HEADCOUNT, ALL INSTITUTIONS</u>	<u>159,149</u>	<u>161,708</u>	<u>161,548</u>	<u>163,225</u>	<u>160,460</u>	<u>159,391</u>	<u>158,309</u>	<u>161,313</u>
FTE								
<u>Public Institutions</u>								
University of Connecticut	18,862	19,537	19,219	19,415	19,063	18,866	19,206	19,964
Connecticut State University	23,433	22,819	23,000	23,764	23,222	23,178	23,118	23,701
Regional Community Colleges	17,160	17,224	17,111	17,109	16,076	15,494	14,980	15,279
State Technical Colleges	5,216	5,421	5,708	5,674	5,118	4,476	3,850	3,462
<u>Total, Public Institutions</u>	<u>64,671</u>	<u>65,001</u>	<u>65,038</u>	<u>65,962</u>	<u>63,479</u>	<u>62,014</u>	<u>61,154</u>	<u>62,406</u>
<u>Independent Institutions</u>								
National	15,866	15,684	16,012	15,982	16,627	16,939	17,135	16,943
Regional	27,784	28,579	27,849	27,657	26,752	26,050	24,942	24,972
Two-Year	1,302	1,286	1,318	1,308	1,318	1,369	1,355	1,298
<u>Total, Independent Institutions</u>	<u>44,952</u>	<u>45,549</u>	<u>45,179</u>	<u>44,947</u>	<u>44,697</u>	<u>44,358</u>	<u>43,432</u>	<u>43,213</u>
<u>TOTAL FTE, ALL INSTITUTIONS</u>	<u>109,623</u>	<u>110,550</u>	<u>110,217</u>	<u>110,909</u>	<u>108,176</u>	<u>106,372</u>	<u>104,586</u>	<u>105,619</u>

Table A2
Connecticut Undergraduate Summary
by Type of Institution
1980-1987

	1980	1981	1982	1983	1984	1985	1986	1987
Public Institutions								
University of Connecticut								
% Part-Time	12.3	13.2	14.9	15.9	15.6	16.4	17.7	17.2
% 25 and over	10.1	10.3	10.8	11.2	11.4	10.8	11.0	11.2
% Female	49.4	50.0	51.5	52.3	52.0	52.0	51.7	51.9
% CT residents:								
Storrs	91.7	91.4	91.3	90.8	90.5	89.7	89.6	88.2
Regional campuses	98.4	97.6	98.4	97.8	98.5	97.9	97.8	97.2
Connecticut State University								
% Part-Time	28.6	29.4	30.6	31.8	32.9	34.4	35.6	36.0
% 25 and over	27.9	31.4	31.3	27.3	27.3	26.6	28.1	28.2
% Female	54.1	54.3	53.6	53.0	52.7	53.4	54.4	55.3
% CT residents	95.3	94.7	94.8	94.5	94.6	94.7	94.8	94.2
Regional Community Colleges								
% Part-Time	70.0	71.1	72.7	73.3	75.2	76.1	77.1	78.5
% 25 and over	53.2	55.2	55.0	55.0	54.2	55.8	54.2	56.9
% Female	65.5	66.3	66.9	67.5	68.3	68.3	68.3	68.2
% CT residents	99.2	98.9	99.0	99.2	98.9	99.0	98.9	98.3
State Technical Colleges								
% Part-Time	59.4	63.4	62.7	62.1	60.9	59.2	65.1	62.3
% 25 and over	40.3	44.7	43.8	45.1	45.1	45.8	49.4	50.2
% Female	23.0	25.2	25.8	24.5	21.2	19.8	20.0	18.7
% CT residents	98.8	99.2	99.5	98.9	98.5	98.7	97.3	99.0
TOTAL, PUBLIC INSTITUTIONS								
% Part-Time	45.6	46.8	48.2	48.7	49.3	49.8	50.8	50.5
% 25 and over	35.5	38.5	38.4	37.3	36.7	36.9	37.9	37.7
% Female	55.0	55.3	55.7	55.9	55.9	56.4	56.8	57.1
% CT residents	96.8	96.5	96.7	96.5	96.2	96.1	95.9	95.4
Independent Institutions								
National Institutions								
% Part-Time	3.4	4.0	4.5	3.9	3.5	3.4	4.3	4.8
% 25 and over	1.9	4.5	4.0	3.7	3.0	3.2	3.6	4.1
% Female	47.5	48.0	48.5	48.2	48.5	48.1	48.1	48.3
% CT residents	21.2	20.4	21.0	20.6	19.7	19.3	18.9	18.4
Regional Institutions								
% Part-Time	42.2	42.8	42.6	42.5	41.8	41.8	42.2	41.8
% 25 and over	33.7	32.8	31.8	32.7	33.0	34.6	34.0	32.7
% Female	53.5	54.0	53.4	53.1	52.9	53.0	53.7	54.2
% CT residents	77.6	76.4	75.2	74.7	73.0	71.8	71.8	70.7
Two-Year Institutions								
% Part-Time	34.6	30.5	29.5	31.0	32.4	38.3	40.6	41.0
% 25 and over	24.6	18.5	20.3	19.1	21.0	24.9	25.7	27.9
% Female	71.4	70.9	70.9	73.0	72.6	72.1	71.4	73.0
% CT residents	81.2	77.9	77.8	78.0	79.3	81.0	81.5	81.2
TOTAL, INDEPENDENT INSTITUTIONS								
% Part-Time	32.3	32.8	32.2	32.0	31.0	31.1	31.2	31.2
% 25 and over	24.6	25.4	24.2	24.6	24.4	25.6	24.9	24.3
% Female	52.7	53.1	52.7	52.5	52.5	52.5	52.9	53.4
% CT residents	63.7	62.6	61.2	60.7	58.8	57.8	57.0	56.1
TOTAL, ALL INSTITUTIONS								
% Part-Time	40.8	41.8	42.8	43.1	43.1	43.5	44.4	44.3
% 25 and over	32.1	33.8	33.6	33.1	32.6	33.1	33.6	33.4
% Female	54.3	54.5	54.7	54.8	54.8	55.1	55.5	55.9
% CT residents	85.0	84.5	84.6	84.5	83.7	83.2	83.1	82.6

Table A3
Connecticut Undergraduate Enrollment
Headcount and FTE
1980-1987

	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
HEADCOUNT								
<u>Public Institutions</u>								
University of Connecticut	15,471	15,889	16,170	16,199	16,292	16,096	16,665	17,671
Connecticut State University	25,252	25,710	26,197	27,158	27,281	27,297	27,465	28,038
Regional Community Colleges	34,082	34,445	35,364	35,625	34,509	33,954	33,437	34,767
State Technical Colleges	7,860	8,705	9,084	8,853	7,893	6,792	6,393	5,515
<u>Total, Public Institutions</u>	<u>82,665</u>	<u>84,749</u>	<u>86,815</u>	<u>87,835</u>	<u>85,975</u>	<u>84,139</u>	<u>83,960</u>	<u>85,991</u>
<u>Independent Institutions</u>								
National	11,425	11,494	11,613	11,590	11,802	11,800	11,913	11,820
Regional	32,870	33,430	31,503	31,162	29,872	29,225	27,667	27,616
Two-Year	1,597	1,564	1,554	1,614	1,675	1,801	1,848	1,804
<u>Total, Independent Institutions</u>	<u>45,892</u>	<u>46,488</u>	<u>44,670</u>	<u>44,366</u>	<u>43,349</u>	<u>42,826</u>	<u>41,428</u>	<u>41,240</u>
<u>TOTAL HEADCOUNT, ALL INSTITUTIONS</u>	<u>128,557</u>	<u>131,237</u>	<u>131,485</u>	<u>132,201</u>	<u>129,324</u>	<u>126,965</u>	<u>125,388</u>	<u>127,231</u>
FTE								
<u>Public Institutions</u>								
University of Connecticut	14,456	14,897	14,888	14,916	14,619	14,292	14,572	15,335
Connecticut State University	20,694	20,254	20,557	21,093	20,690	20,458	20,224	20,415
Regional Community Colleges	17,160	17,224	17,111	17,109	16,076	15,494	14,980	15,279
State Technical Colleges	5,216	5,421	5,708	5,674	5,118	4,476	3,850	3,462
<u>Total, Public Institutions</u>	<u>57,526</u>	<u>57,796</u>	<u>58,264</u>	<u>58,792</u>	<u>56,503</u>	<u>54,720</u>	<u>53,626</u>	<u>54,491</u>
<u>Independent Institutions</u>								
National	10,968	10,442	11,098	11,029	11,365	11,561	11,676	11,501
Regional	23,288	23,733	22,955	22,505	21,632	20,913	19,841	19,699
Two-Year	1,302	1,286	1,318	1,308	1,318	1,369	1,355	1,298
<u>Total, Independent Institutions</u>	<u>35,558</u>	<u>35,461</u>	<u>35,371</u>	<u>34,842</u>	<u>34,315</u>	<u>33,843</u>	<u>32,872</u>	<u>32,498</u>
<u>TOTAL FTE, ALL INSTITUTIONS</u>	<u>93,084</u>	<u>93,257</u>	<u>93,635</u>	<u>93,634</u>	<u>90,818</u>	<u>88,563</u>	<u>86,498</u>	<u>86,989</u>

Table A4
Connecticut Postbaccalaureate Enrollment
Headcount and FTE
1980-1987

	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
HEADCOUNT								
<u>Public Institutions</u>								
University of Connecticut	6,936	7,082	7,146	7,229	7,190	7,472	7,496	7,369
Connecticut State University	7,170	6,596	6,183	6,503	6,436	7,005	7,372	8,233
<u>Total, Public Institutions</u>	<u>14,106</u>	<u>13,678</u>	<u>13,329</u>	<u>13,732</u>	<u>13,626</u>	<u>14,477</u>	<u>14,868</u>	<u>15,602</u>
<u>Independent Institutions</u>								
National	5,662	5,689	5,630	5,748	6,170	6,282	6,364	6,407
Regional	10,824	11,104	11,104	11,544	11,340	11,667	11,689	12,073
<u>Total, Independent Institutions</u>	<u>16,486</u>	<u>16,793</u>	<u>16,734</u>	<u>17,292</u>	<u>17,510</u>	<u>17,949</u>	<u>18,053</u>	<u>18,480</u>
<u>TOTAL HEADCOUNT, ALL INSTITUTIONS</u>	<u>30,592</u>	<u>30,471</u>	<u>30,063</u>	<u>31,024</u>	<u>31,136</u>	<u>32,426</u>	<u>32,921</u>	<u>34,082</u>
FTE								
<u>Public Institutions</u>								
University of Connecticut	4,406	4,640	4,331	4,499	4,444	4,574	4,634	4,629
Connecticut State University	2,739	2,565	2,443	2,671	2,532	2,720	2,894	3,286
<u>Total, Public Institutions</u>	<u>7,145</u>	<u>7,205</u>	<u>6,774</u>	<u>7,170</u>	<u>6,976</u>	<u>7,294</u>	<u>7,528</u>	<u>7,915</u>
<u>Independent Institutions</u>								
National	4,898	5,242	4,914	4,953	5,262	5,378	5,459	5,442
Regional	4,496	4,846	4,894	5,152	5,120	5,137	5,101	5,273
<u>Total, Independent Institutions</u>	<u>9,394</u>	<u>10,088</u>	<u>9,808</u>	<u>10,105</u>	<u>10,382</u>	<u>10,515</u>	<u>10,560</u>	<u>10,715</u>
<u>TOTAL FTE, ALL INSTITUTIONS</u>	<u>16,539</u>	<u>17,293</u>	<u>16,582</u>	<u>17,275</u>	<u>17,358</u>	<u>17,809</u>	<u>18,088</u>	<u>18,630</u>